

WHAT IS CLAIMED IS:

1. A connector for accommodating therein an edge portion of a plate object and for providing electrical connections to terminals formed on the edge portion of the plate object, comprising:

a housing having first and second planes opposite to each other in a first direction, the first and second planes having predetermined space therebetween;

an elastic member arranged within the predetermined space and on the first plane, the elastic member having a first portion on top thereof in the first direction, the first portion, when being pushed in the first direction, causing an elastic reaction force in the first direction;

a supporter arranged within the predetermined space and on the second plane, the supporter having a second portion on top thereof in the first direction, the second portion being located with an interval left between the first and second portions in a second direction perpendicular to the first direction;

a film contact comprising an insulator film and electrical contacts corresponding to the terminals of the plate object, the insulator film having first and second surfaces, the electrical contacts being formed on the first surface of the insulator film, the second surface being fixed on the first and second portions so that the electrical contacts are arranged on at least one of the first and second portions via the insulator film and, when the edge portion of the plate object is inserted between the first and second portions in a third direction oblique to the first and second directions and the plate object is then tilted to be substantially parallel with the first and second planes, are connected to terminals of the plate object; and

holding means for holding parts of the plate object in the first direction when the plate object is tilted.

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2. A connector as claimed in claim 1, wherein the supporter is an elastic member which when the second portion is pushed in the first direction causes an elastic reaction force in the first direction.

3. A connector as claimed in claim 1, the plate object having a predetermined thickness, wherein the first and second portions are located so as to have in the first direction a first interval less than the predetermined thickness of the plate object and to have in a fourth direction perpendicular to the third direction a second interval slightly wider than the predetermined thickness of the plate object.

4. A connector as claimed in claim 1, wherein the electrical contacts are arranged on both the first and second portions via the insulator film.

5. A connector as claimed in claim 1, wherein the insulator film forms a blind alley within the predetermined space in a cross section defined by the first to fourth directions.

6. A connector as claimed in claim 1, wherein the housing further comprising:

two arms opposite to each other in a particular direction perpendicular to the first and second directions, the arms being integrally formed with at least one of the first and second planes and being extended in the second direction; and

two latch portions which are integrally formed with arms, respectively, and which project toward inside space between the two arms so as to serve as the holding means by hooking parts of the plate object when the plate object is tilted to be substantially parallel with the first and second planes.

7. A connector as claimed in claim 1, wherein the elastic member and the supporter are integrally formed with the first and second planes, respectively.

8. A connector as claimed in claim 1, further comprising spring pieces opposite to each other in a particular direction perpendicular to the first and

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second directions, the spring pieces having elastic forces in the particular direction so as to serve as the holding means by sandwiching parts of the plate object in the particular direction when the plate object is tilted to be substantially parallel with the first and second planes.

9. A connector as claimed in claim 1, further comprising tab portions which are integrally formed with the housing and which are fixed on a board so that the connector is held on the board.

10. A connector as claimed in claim 1, wherein the elastic member and the supporter are made of rubber.

11. A connector as claimed in claim 1, the plate object having a guide keyway on the edge thereof, further comprising a guide key corresponding to the guide keyway so as to guide the plate object in cooperation with the guide keyway when the edge portion of the plate object is inserted into the predetermined space.

12. A connector as claimed in claim 11, wherein the guide key is integrally formed with the housing.

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Fig. 1